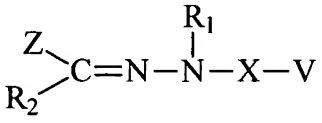
CLAIMS

What is claimed is:

1. An organophotoreceptor comprising an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising:

(a) a charge transport material having the formula



where R_1 and R_2 are, independently, H, an alkyl group, an alkaryl group, or an aryl group;

X is a linking group having the formula $-(CH_2)_m-$, branched or linear, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, a NR_3 group, a CHR_4 group, or a CR_5R_6 group where R_3, R_4, R_5, and R_6 are, independently, H, hydroxyl group, thiol group, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group;

V comprises a vinyl ether group; and

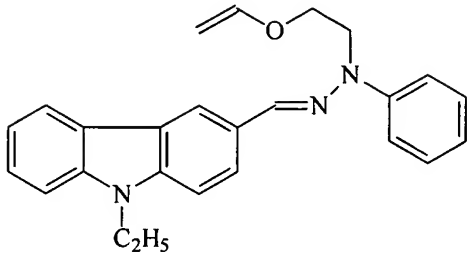
Z comprises an (N,N-disubstituted)arylamine group; and

(b) a charge generating compound.

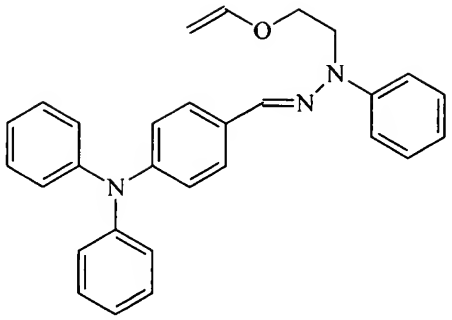
2. An organophotoreceptor according to claim 1 wherein X is CH_2CH_2.

3. An organophotoreceptor according to claim 2 wherein V is $O\text{-}CH_2{=}CH_2$.

4. An organophotoreceptor according to claim 1 wherein the charge transport material has a formula selected form the group consisting of the following:



, and



5. An organophotoreceptor according to claim 1 wherein the photoconductive element further comprises a second charge transport material.

6. An organophotoreceptor according to claim 5 wherein the second charge transport material comprises an electron transport compound.

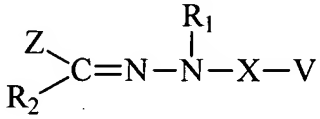
7. An organophotoreceptor according to claim 1 wherein the photoconductive element further comprises a binder.

8. An electrophotographic imaging apparatus comprising:

(a) a light imaging component; and

(b) an organophotoreceptor oriented to receive light from the light imaging component, the organophotoreceptor comprising an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising:

(i) a charge transport material having the formula



where R_1 and R_2 are, independently, H, an alkyl group, an alkaryl group, or an aryl group;

X is a linking group having the formula $-(CH_2)_m-$, branched or linear, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is

optionally replaced by O, S, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, a NR_3 group, a CHR_4 group, or a CR_5R_6 group where R_3, R_4, R_5, and R_6 are, independently, H, hydroxyl group, thiol group, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group;

V comprises a vinyl ether group; and

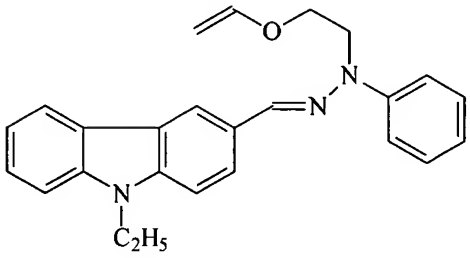
Z comprises an (N,N-disubstituted)arylamine group; and

(ii) a charge generating compound.

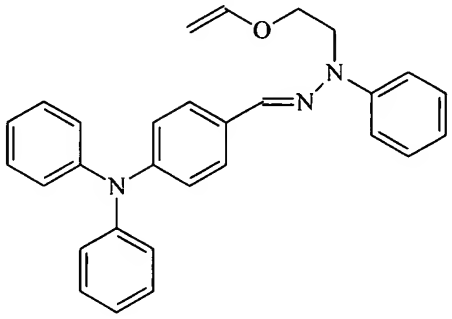
9. An electrophotographic imaging apparatus according to claim 8 wherein X is CH_2CH_2.

10. An electrophotographic imaging apparatus according to claim 9 wherein V is $O\text{-}CH_2{=}CH_2$.

11. An electrophotographic imaging apparatus according to claim 8, wherein the charge transport material has a formula selected form the group consisting of the following:



, and



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12. An electrophotographic imaging apparatus according to claim 8 wherein the photoconductive element further comprises a second charge transport material.

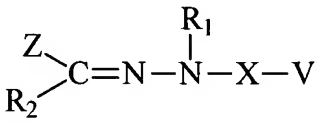
13. An electrophotographic imaging apparatus according to claim 12 wherein second charge transport material comprises an electron transport compound.

14. An electrophotographic imaging apparatus according to claim 8 further comprising a liquid toner dispenser.

15. An electrophotographic imaging process comprising;

(a) applying an electrical charge to a surface of an organophotoreceptor comprising an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising

(i) a charge transport material having the formula



where R_1 and R_2 are, independently, H, an alkyl group, an alkaryl group, or an aryl group;

X is a linking group having the formula $-(CH_2)_m-$, branched or linear, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, a NR_3 group, a CHR_4 group, or a CR_5R_6 group where R_3, R_4, R_5, and R_6 are, independently, H, hydroxyl group, thiol group, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group;

V comprises a vinyl ether group; and

Z comprises an (N,N-disubstituted)arylamine group; and

(ii) a charge generating compound.

(b) imagewise exposing the surface of the organophotoreceptor to radiation to dissipate charge in selected areas and thereby form a pattern of charged and uncharged areas on the surface;

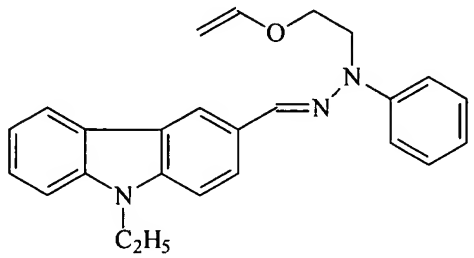
(c) contacting the surface with a toner to create a toned image; and

(d) transferring the toned image to substrate.

16. An electrophotographic imaging process according to claim 15 wherein X is CH_2CH_2.

17. An electrophotographic imaging process according to claim 16 wherein V is $O\text{-}CH_2{=}CH_2$.

18. An electrophotographic imaging process according to claim 15 wherein the charge transport material has a formula selected from the group consisting of the following:



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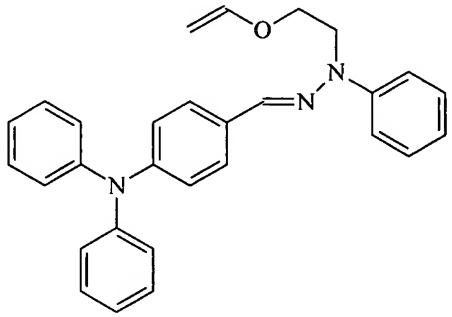

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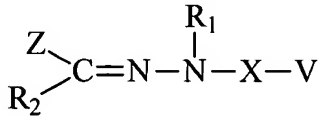
19. An electrophotographic imaging process according to claim 15 wherein the photoconductive element further comprises a second charge transport material.

20. An electrophotographic imaging process according to claim 19 wherein the second charge transport material comprises an electron transport compound.

21. An electrophotographic imaging process according to claim 15 wherein the photoconductive element further comprises a binder.

22. An electrophotographic imaging process according to claim 15 wherein the toner comprises a liquid toner comprising a dispersion of colorant particles in an organic liquid.

23. A charge transport material having the formula



where R_1 and R_2 are, independently, H, an alkyl group, an alkaryl group, or an aryl group;

X is a linking group having the formula $-(CH_2)_m-$, branched or linear, where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, a NR_3 group, a CHR_4 group, or a CR_5R_6 group where R_3, R_4, R_5, and R_6 are, independently, H, hydroxyl group, thiol group, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group;

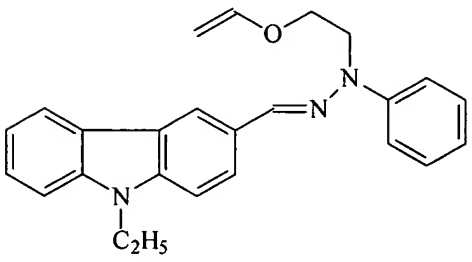
V comprises a vinyl ether group; and

Z comprises an (N,N-disubstituted)arylamine group.

24. A charge transport material according to claim 23 wherein X is CH_2CH_2.

25. A charge transport material according to claim 24 wherein V is $O-CH_2=CH_2$.

26. A charge transport material according to claim 23 wherein the charge transport material has a formula selected from the group consisting of the following:



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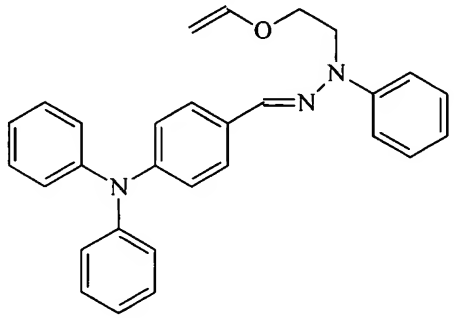

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